

Sub
C 217
3
9. A system for controlling an air-fuel ratio in an internal combustion engine, comprising:

a hydrocarbon trap positioned in an exhaust path downstream of the engine;

an air supply device capable of delivering air to said exhaust path upstream of said hydrocarbon trap for oxidizing hydrocarbons stored in said trap;

a temperature sensor generating a signal indicative of a temperature of said trap;
and

a controller configured to induce said device to deliver said air to said trap when said temperature signal indicates a temperature of said trap is greater than a predetermined temperature, said controller further configured to adjust the air/fuel ratio in the engine rich of stoichiometry during said air delivery.

Sub
C 217
11. A method for controlling an engine, said engine communicating with a first emission control device, said first emission control device communicating with a second emission control device, said method comprising:

determining a temperature of said second emission control device;

combusting an air-fuel mixture rich of stoichiometry in an engine cylinder to reduce NOx stored in said first emission control device; and

applying oxygen upstream of said second emission control device to oxidize hydrocarbons stored in said second emission control device and hydrocarbons from said combusted rich air-fuel mixture when said temperature of said second emission control device is greater than a predetermined temperature.